



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,745	11/15/2000	Kevin Eugene Dombkowski	LUC-162/Dombkowski 6-27	2943
32205	7590	06/10/2004	EXAMINER PHAM, TUAN	
PATTI & BRILL ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			ART UNIT 2643	PAPER NUMBER

DATE MAILED: 06/10/2004

[Handwritten number 9]

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/713,745

Applicant(s)

DOMBKOWSKI ET AL.

Examiner

TUAN A PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-24 is/are allowed.
- 6) ☒ Claim(s) 1,3,5-17,25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 5-6, and 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown (U.S. Patent No.: 6,226,356).

Regarding claims 1 and 13, Brown teaches a line card for a telecommunications system comprising (see figure 3, line card 305, col.5, ln.55-56):
a multiple mode circuit capable of supporting symmetric and asymmetric telecommunication services (see figure 3, line card 305, POTS 315, DSL 118, col.1, ln.43-54, col.5, ln.50-59),

a POTS interface for supporting POTS service (see figure 3, line card 305, POTS 315, and

an xDSL interface for supporting symmetric and asymmetric xDSL services (see figure 3, line card 305, POTS 315, DSL 118, col.1, ln.43-54, col.5, ln.50-59).

Regarding claim 3, Brown further teaches the line card wherein the xDSL interface is capable of supporting any one of asymmetric digital subscriber line service, asymmetric digital subscriber line lite service, very high speed digital subscriber line service, symmetric digital subscriber line service, high bit rate digital subscriber line service, single pair symmetric digital subscriber line service, HDSL2 and SHDSL (see col.5, ln.50-59).

Regarding claims 5-6, 14-15, and 16-17, Brown further teaches the line card wherein the multiple mode circuit substantially concomitantly supports POTS service, asymmetric digital subscriber line services, and symmetric digital subscriber line services (see col.1, ln.43-54, col.5, ln.50-59).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7-12, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (U.S. Patent No.: 6,226,356) in view of Heidari et al. (U.S. Patent No.: 6,512,739, hereinafter, "Heidari").

Regarding claim 7, Brown teaches a line card for a telecommunications system comprising (see figure 3, line card 305, col.5, ln.55-56):

a multiple mode circuit capable of supporting symmetric and asymmetric telecommunication services (see figure 3, line card 305, POTS 315, DSL 118, col.1, ln.43-54, col.5, ln.50-59),

a POTS interface for supporting POTS service (see figure 3, line card 305, POTS 315, and

an xDSL interface for supporting symmetric and asymmetric xDSL services (see figure 3, line card 305, POTS 315, DSL 118, col.1, ln.43-54, col.5, ln.50-59).

It should be noticed that Brown fails to clearly teach an automatic mode circuit which substantially automatically determines which symmetric and asymmetric services,

should be supported. However, Heidari teaches such features (see figure 3, DSP 372, col.6, ln.46) for a purpose of detecting the xDSL signals.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of automatic mode circuit which substantially automatically determines which symmetric and asymmetric services, should be supported, as taught by Heidari, into view of Brown in order to improve the controlling of the system and better services.

Regarding claim 8, Heidari further teaches the line card wherein the automatic mode circuit comprises: a controller for receiving instructions regarding the services being supported and for controlling the multiple mode circuit based on the instructions (see col.6, ln.50-55).

Regarding claim 9, Heidari further teaches the line card wherein the controller receives the instructions from external devices (see col.6, ln.40-65).

Regarding claim 10, Heidari further teaches the line card wherein the controller is capable of changing the services being supported during a communication session (see col.6, ln.40-65).

Regarding claim 11, Heidari further teaches the line card wherein the controller changes the services being supported during a communication session based on information received via a handshake signal (see col.7, ln.20-35).

Regarding claim 12, Heidari further teaches the line card wherein the automatic mode circuit comprises a controller for monitoring the multiple mode circuit, for determining which one of the services should be supported based on operation of the

multiple mode circuit, and for instructing the multiple mode circuit to support the one of the services (see col.9, ln.1-45).

Regarding claim 25, Heidari further teaches the line card for the telecommunications system wherein the xDSL interface comprises a central office controller, a transmit xDSL branch, and a receive xDSL branch, wherein the central office controller controls the transmit xDSL branch and the receive xDSL branch to support the symmetric and asymmetric xDSL services (see figure 2, DSP 218, col.3, ln.45-55, col.5, ln.8-15).

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (U.S. Patent No.: 6,226,356) in view of Heidari et al. (U.S. Patent No.: 6,512,739, hereinafter, "Heidari") as applied to claim 1 above, and further in view of Amrany et al. (U.S. Patent No.: 6,067,316, hereinafter "Amrany").

Regarding claim 26, Brown and Heidari, in combination, fails to clearly teach the transmit xDSL branch comprises a transmit xDSL digital signal processor, a transmit xDSL digital-to-analog converter, and a transmit xDSL band limiting filter, and the receive xDSL branch comprises a signal splitter, a receive high pass filter, a receive xDSL band limiting filter, a receive xDSL analog-to-digital converter, and a receive xDSL digital signal processor. However, Amrany teaches such features (see figure 3, DSP 94, D/A 96, XMT filter 98, A/D 100, RCV filter 102, high pass filter 68, POTS splitter 60, col.5, ln.1-67) for a purpose of combining xDSL and other services.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of transmit xDSL branch comprises a transmit xDSL digital signal processor, a transmit xDSL digital-to-analog converter, and a transmit xDSL band limiting filter, and the receive xDSL branch comprises a signal splitter, a receive high pass filter, a receive xDSL band limiting filter, a receive xDSL analog-to-digital converter, and a receive xDSL digital signal processor, as taught by Amrany, into view of Brown and Heidari in order to improve the better services.

Allowable Subject Matter

6. Claims 18-24 are allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Chaplik et al. (U.S. Patent No. 6,693,916), Hjartarson et al. (U.S. Patent No. 6,295,343), Anderson et al. (U.S. Patent No. 6,728,370), and Wegleitner (U.S. Patent No. 6,480,487) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s). These references are also concerned for supporting the system and method for providing data and voice services on the telephone line by teaching the line card device having XDSL and POTS in the central office.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (703) 305-4987. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (703) 305-4708 and

IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600